FOOD SAFETY SENTINEL

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EDITOR'S COMMENTS

Producing safe meat products is vital to consumers and to meat processors. To keep our industry strong, consumers must have confidence that the food we produce is safe.

Unfortunately, it is impossible to completely eliminate bacteria from the meat processing environment because livestock serve as reservoirs of microorganisms and provide a direct source of contamination during the dressing procedure. The good news is that research has shown that sanitary dressing procedures can drastically reduce the amount of bacteria that finds its way into meat products. By using the best carcass dressing practices, processors can provide a safer product and reduce the incidence of foodborne illness.

Meat processors in Alberta use either rail dressing or bed dressing systems. Good sanitation is important in either system, but because bed dressing has a higher risk of contamination, extra care must be taken to ensure that bed dressing procedures are performed in a sanitary manner. This issue of the Food Safety Sentinel provides some useful tips for dressing cattle using either procedure and provides additional information for those processors using the bed dressing technique. I hope these tips will be useful in helping you with your commitment to food safety.

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The Agricultural Policy Framework (APF)
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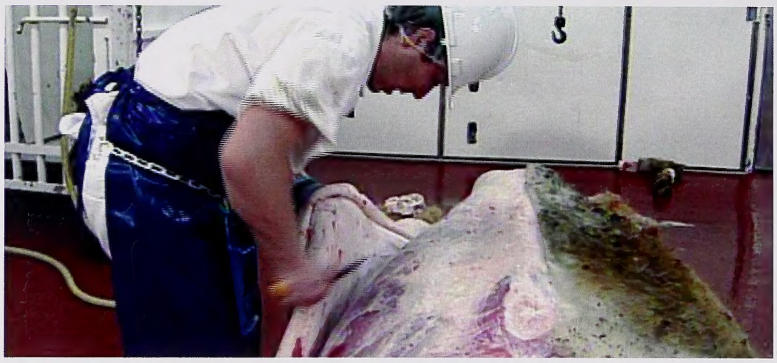
Alberta

KNOW THE HAZARDS

Most of the bacteria that end up on meat come from the hide of the animal, the hands of workers, or from the carcass coming in contact with dirty surfaces, such as the floor or equipment. Contamination can also be spread indirectly from aerosols when the floor is washed, from insects and other pests, and from dust and other contaminants that enter your facility through screens and other entrance sites.

The most common bacteria that can cause foodborne illness in raw meat, which can be reduced by proper skinning and evisceration procedures are:

- Staphylococcus aureus
- E. coli
- Salmonella sp.
- Listeria monocytogenes
- Clostridium botulinum and Clostridium perfringens



BED DRESSING

Know the Basics

There are as many ways to skin a beef as there are to "skin a cat", but not all of them result in a top quality product. By following a few basic rules, processors can significantly reduce the contamination levels on a carcass. This will allow extra hanging time during the busy times and will ensure that customers receive a product that is safe and of the best quality possible.

The old saying, "haste makes waste" rings true when it comes to meat processing. Most butchers have excellent knife skills and can very quickly have an animal dressed and in the cooler, but even though speed is an asset, the cost of contamination can eliminate any gains made by completing the task quickly. We all know that proper cooking of raw meat kills bacteria, but some consumers prefer to eat rare or even raw meat. Since we can't ensure that meat will be properly cooked, we have to do our best to make sure dangerous bacteria don't get on the meat in the first place.

The Standard Operating Practices (SOP) for Bed Dressing Beef provided by Alberta Agriculture and Food (AF) is intended to be used as a "gold standard" for all meat processing facilities in Alberta to aspire to. The methods outlined in the procedure were developed to help reduce the likelihood of carcass contamination and thereby improve shelf life and safety of meat products. Providing the SOP was a way for AF to ensure that all abattoirs are aware of current practices and are conducting activities consistently throughout the province. Routine audits and supervisory visits by the Regulatory Services Division have been coordinated to help facilities to evaluate their current practices and the Food Safety Division consultants will assist facilities to customize the SOP to their facility. Here are a few key points to remember from the SOP.

- Remember that dirty jobs are any jobs where you may contact the hide. Clean jobs are any jobs after the hide has been removed.
- Wash hands and equipment with soap, and clean and sanitize knives and saws when moving from a dirty to a clean job and between carcasses.

- To reduce the number of times you sanitize your knife you can use a "designated dirty" knife and a "designated clean" knife. It's also a good idea to dedicate personnel to "clean" and "dirty" jobs whenever possible.
- When skinning, ensure that hide flaps are big enough to not fall back onto the carcass and contaminate it.
- Do not try to wash off trim contamination. Washing only removes visible contamination and is not effective for removing bacteria. Trimming removes significantly more bacteria than washing and is considered the most effective method of removing contamination.
- Routinely remove debris and contamination from the floor. Squeegees are recommended because they do not create aerosols or spray contamination onto the carcass.
- When you think you have caused the carcass to become contaminated you must trim the area even if you cannot see any visible contamination.
- Carcasses that hang within 15–30 cm (6") of the floor must be quartered/ trimmed or pinned to ensure that they do not contact the floor.

Tag Removal

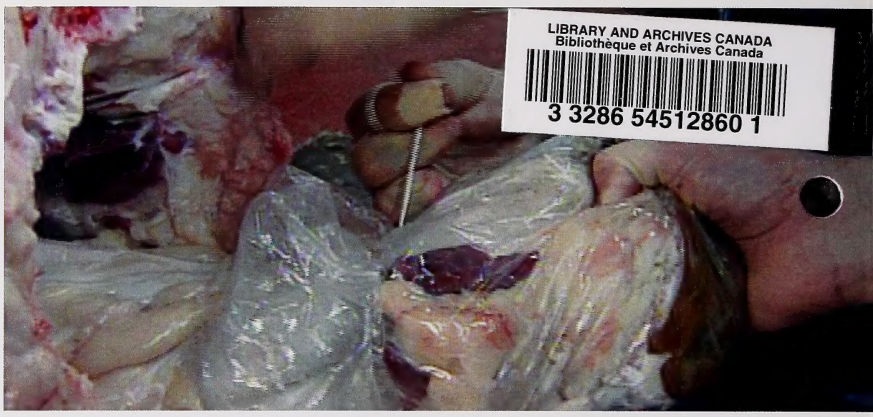
Heavily contaminated carcasses are a concern because of the increased potential for contamination of the meat. Many federal plants have implemented measures to control hide contamination and we also recognize the need to address this issue. A simple cost effective approach for small abattoirs is presented in the SOP but with the ingenuity and skill of many of the facility owners, other methods may soon be discovered.

Equipment

- Hands free sinks and/or hands free wash stations are required in the processing plant and should be placed in a convenient location.
- Ensure that hand held hoses are kept clean and sanitary.
- Knife sanitizers must operate at greater than a minimum of 82 °C (180 °F).
- Avoid using high pressure washers for carcass washing because the pressure may push embedded contamination further into the carcass rather than removing it.

Washing Up

- Routinely remove debris and contamination from the floor.
- Ensure that hides and offal are removed from the kill floor after each carcass.
- Warm water is recommended for washing the bone dust and blood off the carcass during the final wash. Ensure that the saw(s) are rinsed and sanitized between animals.
- The evisceration table must be cleaned and sanitized between animals.



FUNDING AVAILABLE TO IMPROVE FOOD SAFETY PRACTICES

Funding is still available for you to improve your food safety practices or implement the Meat Facilities Standards or HACCP. Even small changes may be eligible for funding. You may qualify for up to $20,000.

We are ready to assist you!

Getting started is easier than you think.

www.agric.gov.ab.ca/aha
aha@gov.ab.ca

1 (780) 427-4054, toll free 310-0000

Funding is available through the Agricultural Policy Framework, Food Safety Initiative (APF/FSI) – a Federal, Provincial, Territorial Initiative.

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Bed Dressing Special Considerations

- Care should be taken to avoid contamination of neck tissue when the carcass is placed on the skinning bed after removing the head.
- Ensure that exposed tissue does not contact the floor, cradle, outside skin surfaces, or any other contaminated objects such as employee boots or aprons at any time during the procedure.
- The floor beneath the cradle must be cleaned after each carcass and sanitized if contaminated.

Rodding the Weasand (esophagus)

- This step prevents the stomach contents from contacting the meat as the paunch is removed from the carcass. This activity can be conducted at various stages during the dressing procedure and it is up to you to determine how it can be best conducted in your particular operation. Although it is best to conduct this step at the bleeding stage only, those that are able to hoist the carcass will be able to rod the weasand at this point and others may rod the weasand on the cradle. (Suspending the head after bleeding while the carcass is on the floor will also allow you to insert the rod). If you cannot rod the weasand prior to head removal you should clip/tie the weasand before the head is removed.

Bagging the Bung

The most effective method of controlling contamination from the bung and bladder is by covering them and tying them to prevent spillage. Although washing the area removes the visible contamination it does not remove the bacteria that can cause food-borne illness.

Identifying SRMs

Specified Risk Materials, or SRMs, are parts of a ruminant animal that are most likely to be contaminated with TSE prions if they are present. They are unsuitable for human consumption and must be handled carefully to avoid cross contamination of the meat.

It's important to consider SRM removal requirements when conducting dressing procedures.